



FIG.1A

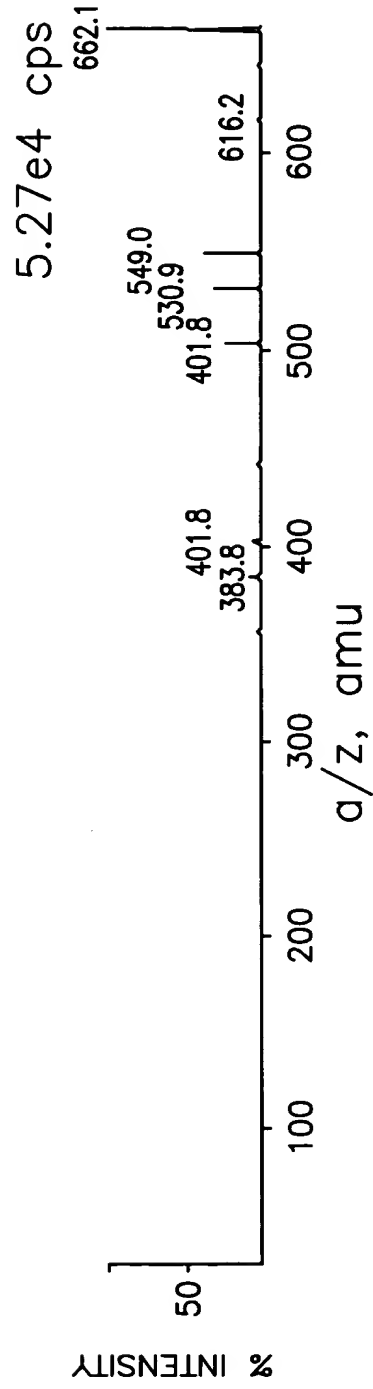


FIG.1B

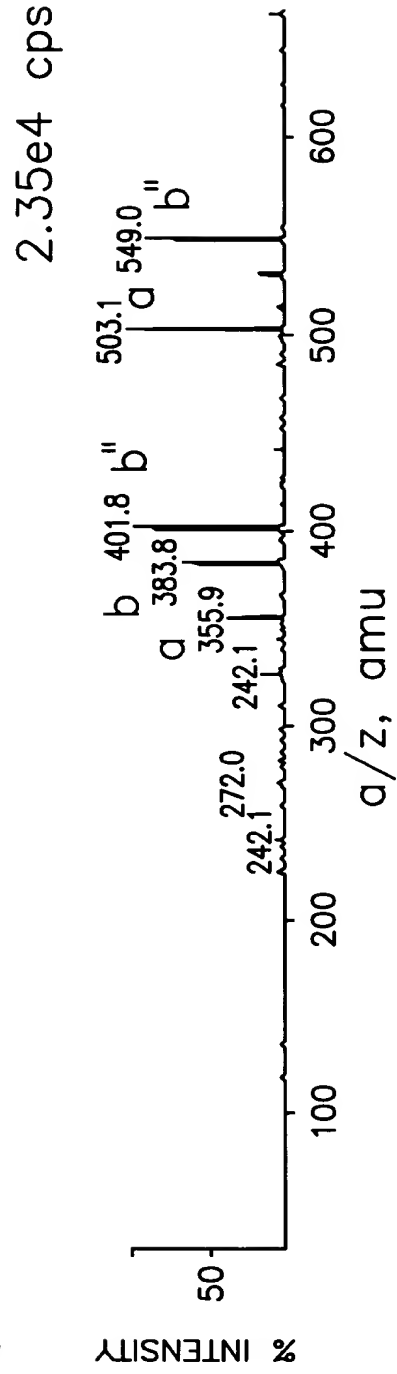




FIG.1C

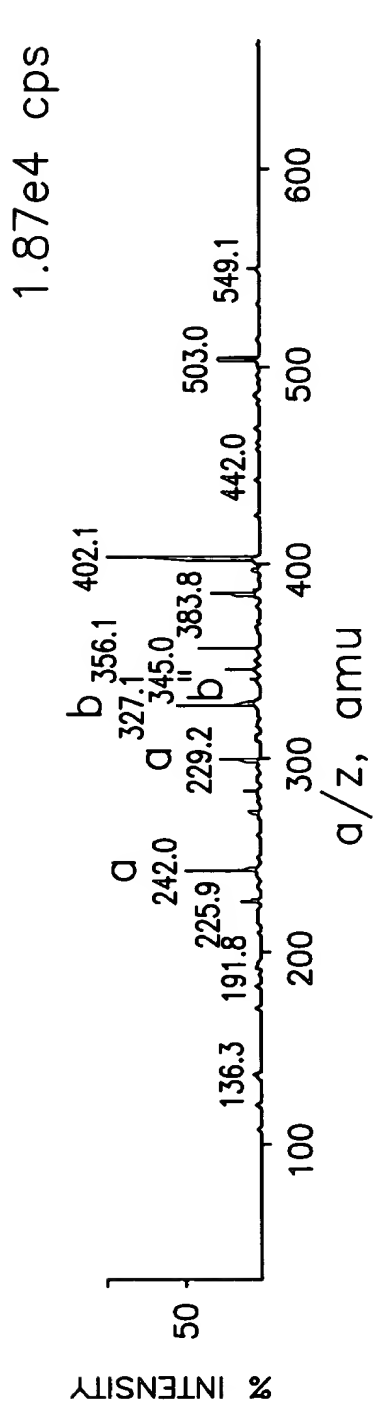
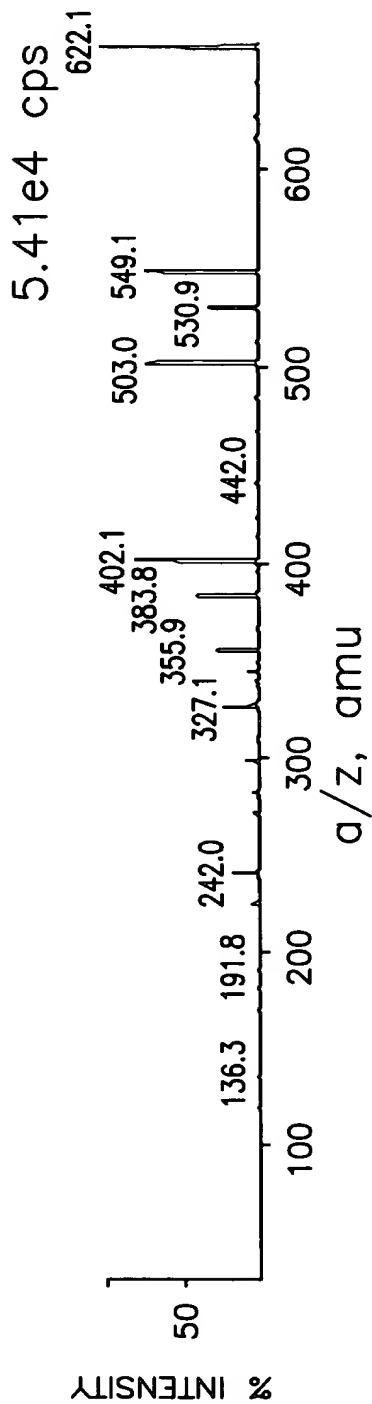


FIG.1D



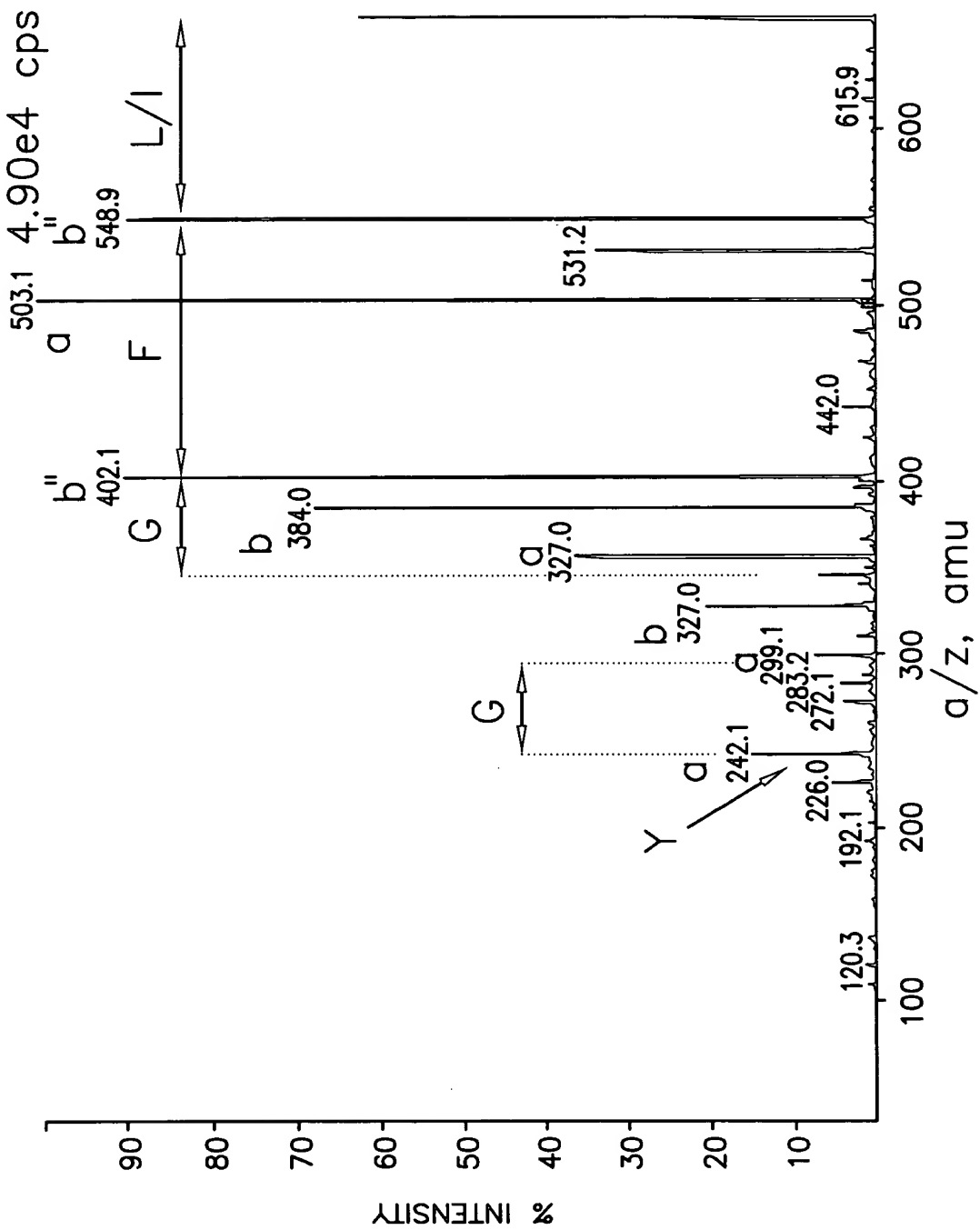




FIG. 3

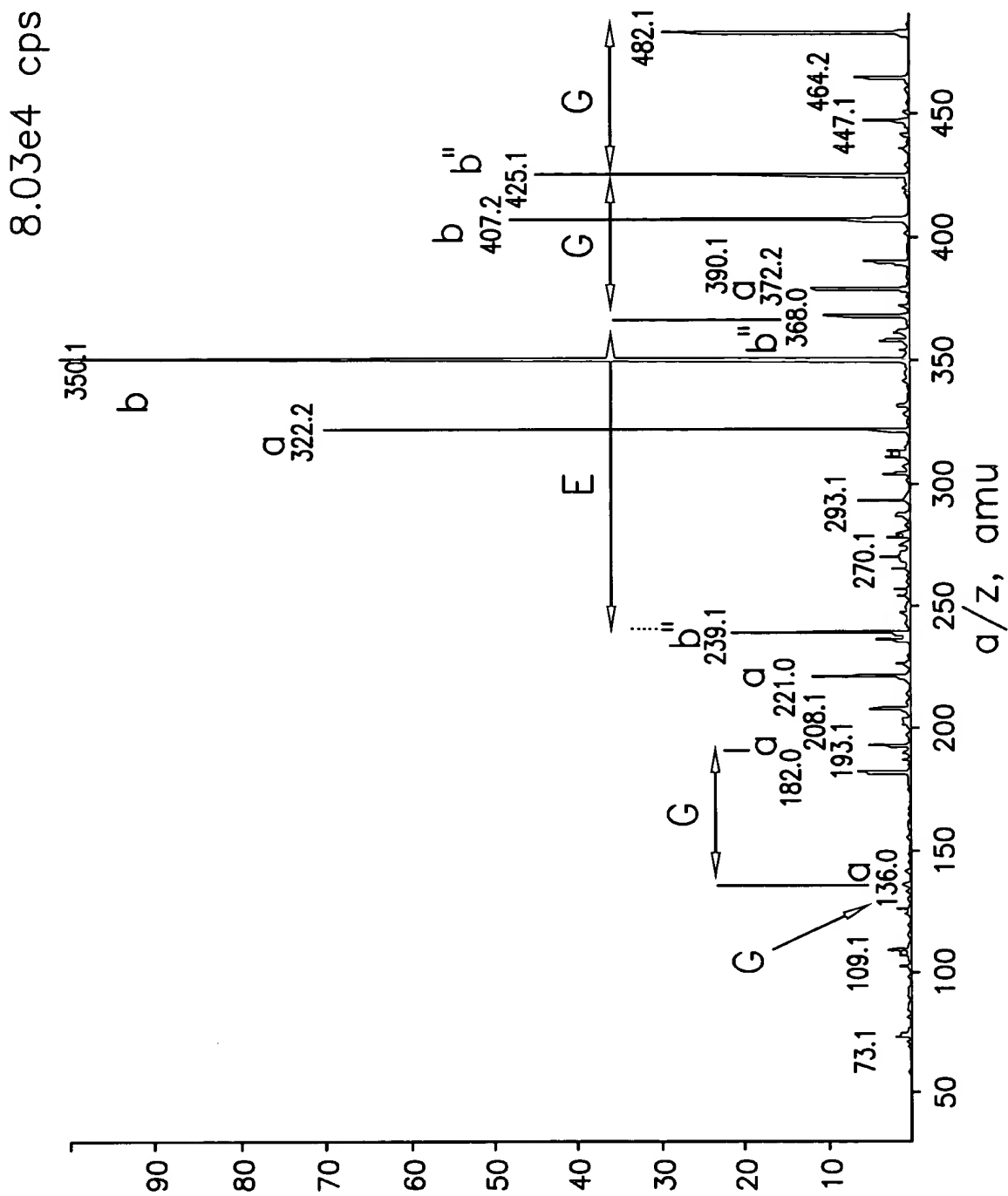
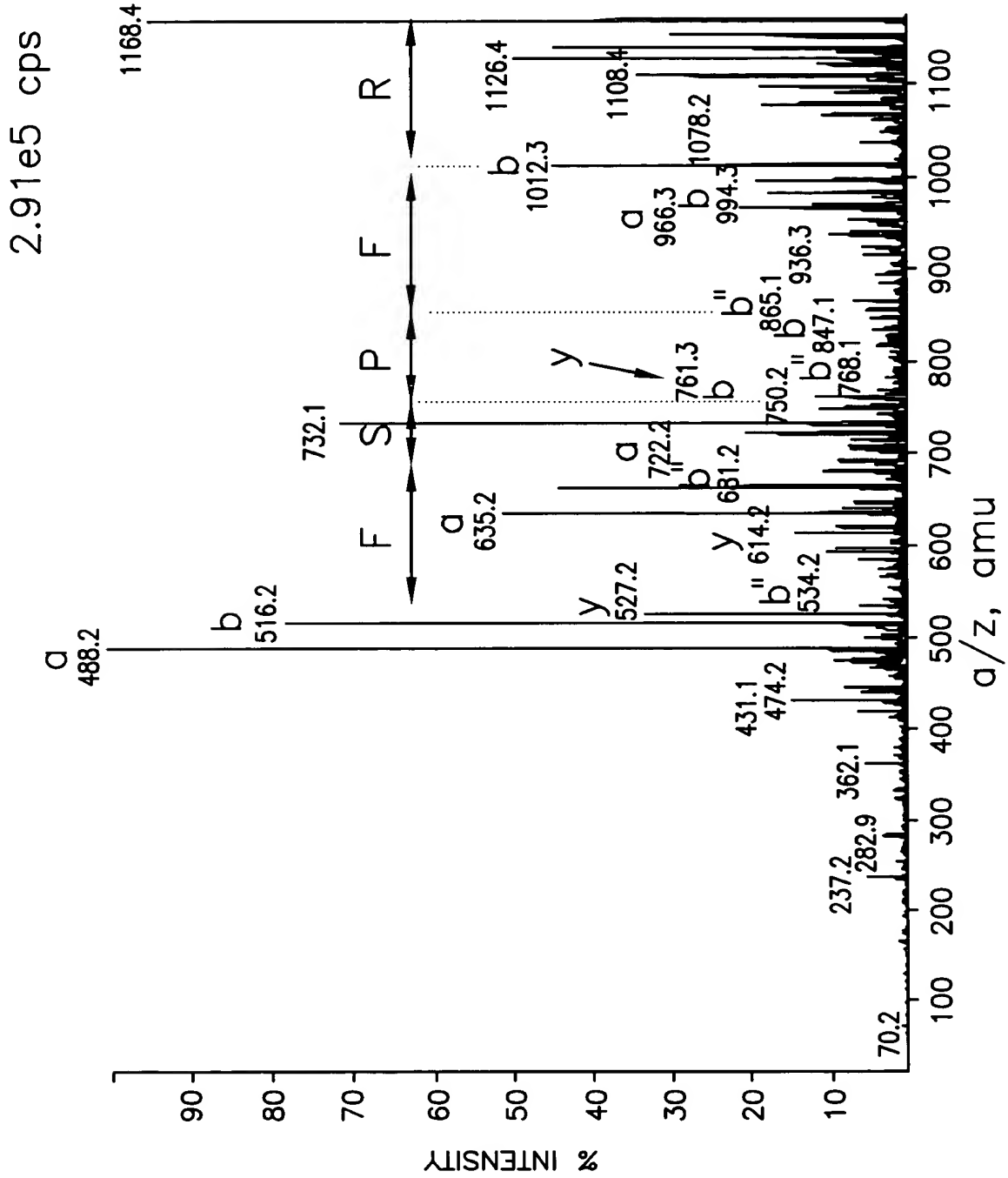




FIG. 4





8.20e3 cps

FIG. 5

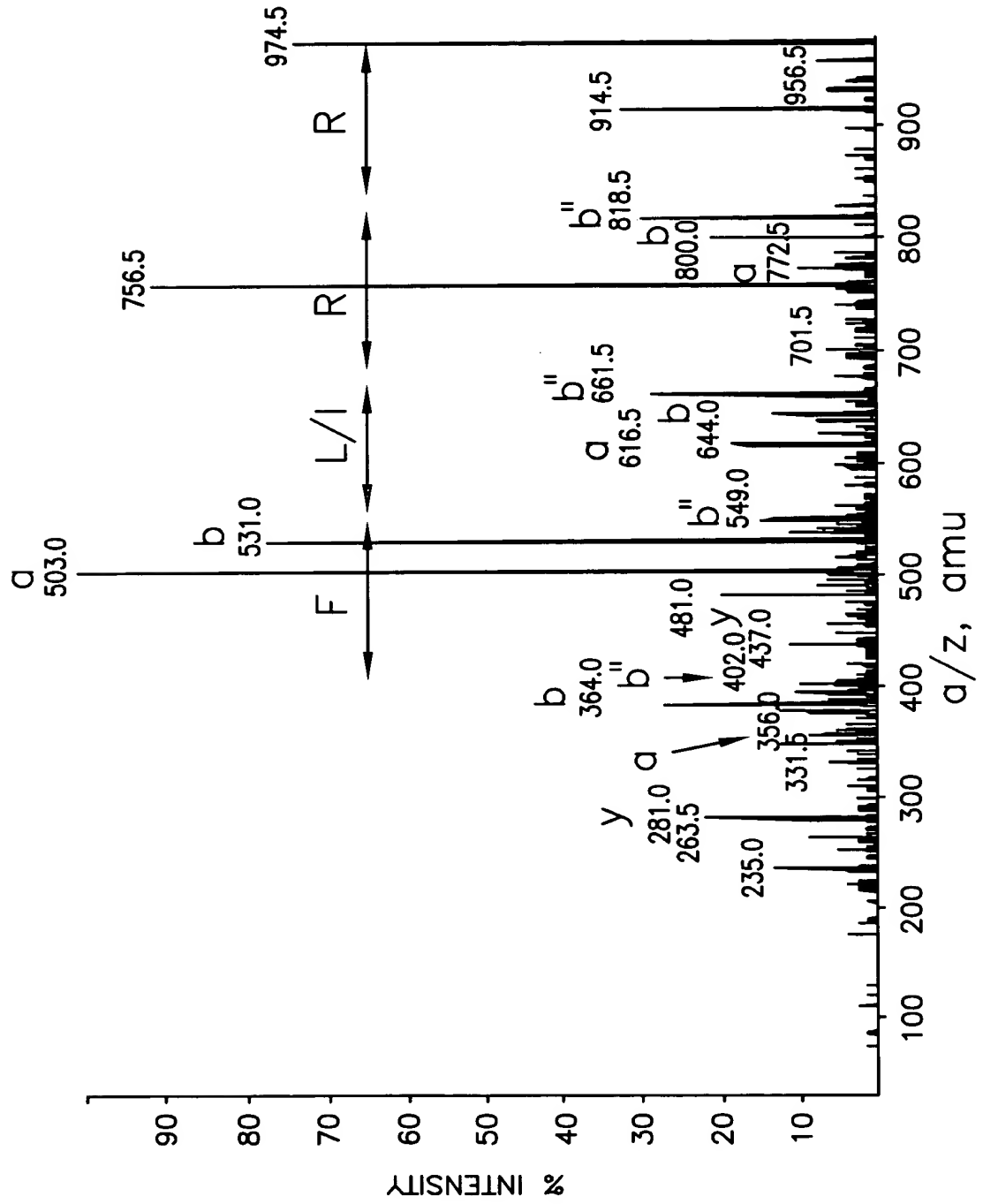


FIG. 6A

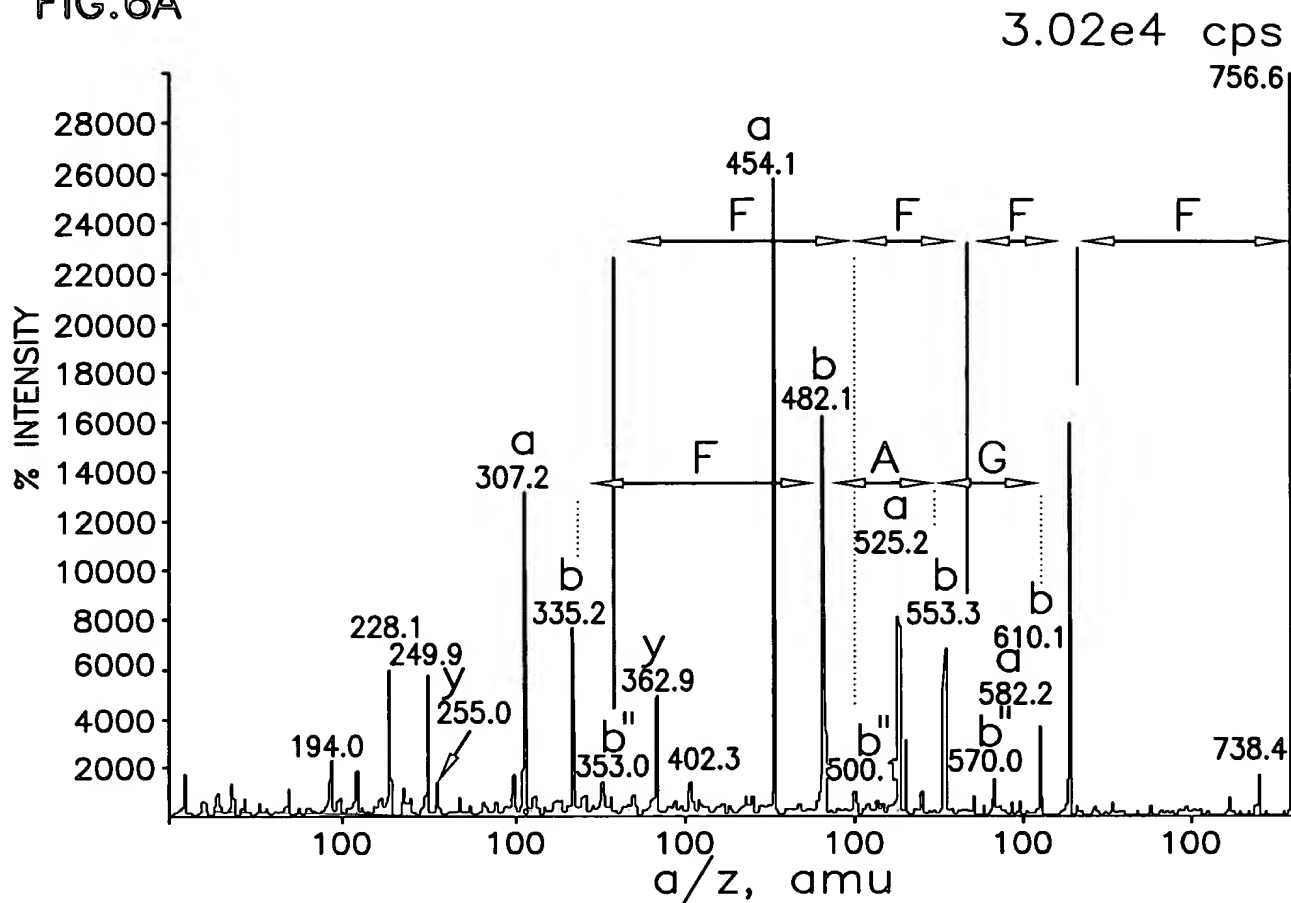
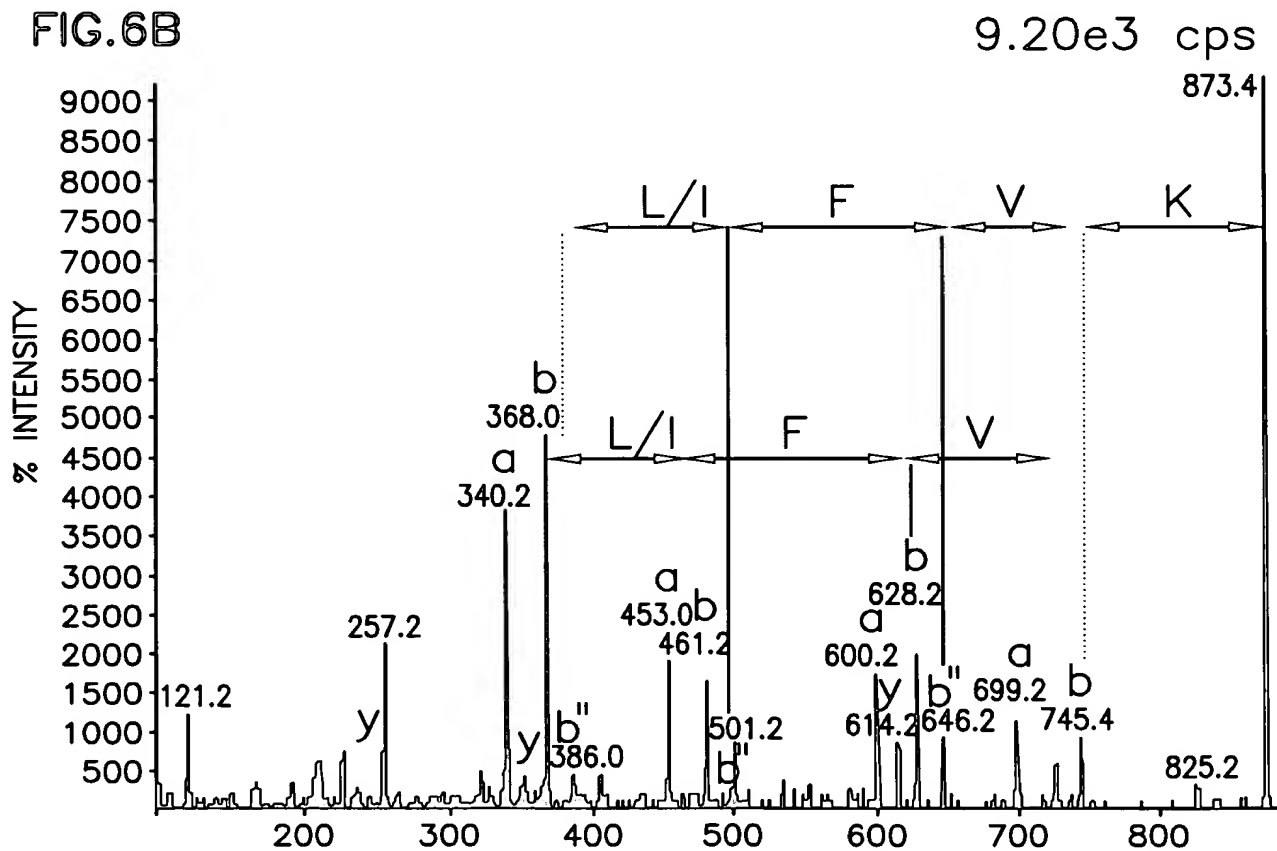


FIG. 6B





## FIG.7A

### Option Explicit

%%%

///, Type Declaration

%%%

///, Constant Declaration

Const ciFrmHeight As Integer = 5900 ///, Form height

Const ciFrmHeight As Integer = 9600 ///, Form height

%%%

///, Variable Declaration

Dim icountFound As Integer ///, No of series found

%%%

///, Prototypes

%%%

///, Funtion Declaration

Private Sub Form\_Load()

///, Initialization

Call P\_LoadForm

End Sub





FIG.7B

```
/////////////////////////////////////////////////////////////////
///
///, Synopssis   :P_LoadFoam()
///, Name       :Private Sub P_LoadForm()
///,
///, Input       :None
///,
///, Return      :None
/////////////////////////////////////////////////////////////////

Private Sub P_LoadFoam()
    ///, Label initialization
    lblFirstRow.Caption = " "
    lblFirstValue.Caption = " "
    lblSecondRow.Caption = " "
    lblSecondValue.Caption = " "
    lblThirdRow.Caption = " "
    lblThirdValue.Caption = " "

    ///, Parameters initialization
    'glErrCode = RC_SUCCESS
    'gsErrMsg = " "
End Sub
```



FIG.7C

Private Sub cmdOK\_Click()

    Call P\_FirstUpdate

End Sub

%%%

///,

///, Synopssis :P\_FirstUpdate

///,

///, Name :Private Sub P\_FirstUpdate()

///,

///, Description :Update in the first form

///,

///, Input :None

///,

///, Return :None

///,

%%%

Private Sub P\_FirstUpdate()

    Screen.MousePointer = vbHourglass

    'glErrCode = RC\_SUCCESS

    Screen.MousePointer = vbDefault

    Call FindNoSeries

End Sub

Private Sub cmdCancel\_Click()

    Unload Me

    Exit Sub

End Sub

Private Sub Form\_Unload(Cancel AS Integer)

    ///, Clean up the form

    Call P\_UnloadForm

End Sub



## FIG.7D

```
/////////////////////////////////////////////////////////////////
///
///. Synopssis :P_FirstUploadForm
///.
///. Name      :Private Sub P_UploadForm()
///.
///. Description :Release the resource which occupied by the parameters
///.             in the form
///. Input      :None
///.
///. Return     :None
///.
```

```
/////////////////////////////////////////////////////////////////
```

Private Sub P\_UploadForm()

End Sub

```
/////////////////////////////////////////////////////////////////
///
///. Synopssis :FindNoSeries
///.
///. Name      :FindNoSeries() As Long
///.
///. Description :Function to update Uex file and stock cosing price
///.
///. Input      :N/A
///.
///. Return     :FindNoSeries RC_SUCCESS Success
///.             RC_ERROR Error
///.
```

```
/////////////////////////////////////////////////////////////////
```

Public Funtion FindNo Series() As Long

Dim gsPath As String

Dim gsCEFile As String



FIG.7E

```
Dim gsErrMsg As String
Dim gsExist As String
Dim takeFile As String
Dim giCEFileNo As Integer
Dim bCloseFileNo As Boolean
Dim sNextLn As String
Dim asNumberFound(800) As String
Dim sFileName As String
'FindNoSeries = RC_ERROR
bCloseFile = True
'gsErrMsg = " "

'gsPath = App.Path
'///, Name of file is SortRecord
gsCEFILE = gsPath & "/" & "SortRecord" & "/"
sExit = Dir(gsCEFile)
sFileName = txtFileName.Text & ".txt"
If sExist = sFileName Then
    bCloseFile = False
End If

If bCloseFileThen
    '///, "not found. Update process not proceeded."
    gsErrMsg = "SortRecord not found. Process stops."
    MsgBox (gsErrMsg)
    'FindNoSeries = RC_ERROR
    Exit Function
End If

giCEFileNo = FreeFile
takeFile = gsCEFile & sExist
Open takeFile For Input As #giCEFileNo

Dim tLnNum As Long
```



## FIG.7F

ILnNum = 0

Line Input #giCEFileNo. sNextLn

Do Until UCase(Trim(sNextLn)) = "END"

///, Vailidation

If EOF(giCEFileNo) Then

///, "Unexpected end of file."

gsErrMsg = "Unexpected end of file."

MsgBox (gsErrMsg)

'FindNo Series =RC\_ERROR

Exit Function

End If

If NotIsNumeric(sNexrLn) Then

///, "Unexpected end of file."

gsErrMsg = "Non-numeric input" & "Row" & ILnNum + 1 & "."

MsgBox (gsErrMsg)

'FindNoSeries = RC\_ERROR

Exit Function

End If

If ILnNum <> 0 Then

If Val(asNumberFound(ILnNum - 1)) < Val(sNextLn) Then

gsErrMsg = "The input numbers are not sorted.(at row" & ILnNum + 1 & ".)"

MsgBox (gsErrMsg)

'FindNoSeries = RC\_ERROR

Exit Function

End If

End If

asNuberFound(ILnNum) = SNextLn

DoEvents

Line Input #giCEFileNo. SnextLn

ILnNum = (ILnNum +1)

Loop



FIG.7F

```
If Not EOF(giFileNo) Then
    ///, "Unexpected end of file"
    gsErrMsg = "unexpected end of file"
    MsgBox (gsErrMsg)
    'FindNoSeries = RC_ERROR
    Exit Function

End If

Close #giCEFileNo

Dim IPrimaryNo As String
Dim LsecondaryNo As String
Dim ITotalNo As String
Dim iOuterLoop As Integer
Dim ilnnerLoop As Integer
Dim bFound As Boolean
Dim bNotFound As Boolean
Dim IMagicNo As String
Dim ITolNo As String
Dim IMagicOne As String
Dim IMagicTwo As String
Dim ITolOne As String
Dim ITolTwo As String
Dim asNumberOuput(200) As Long
Dim iCountOutput As Integer
Dim iFileNum As Integer
Dim putFile As String

bCloseFile = True

///, "Unexpected end of file"
'gsPath = App.Path
///, Name of file is SortRecord
gsCEFile = gsPath & "/" & "Result" & "/"
```



## FIG.7H

```
'sExist = Dir(gsCEFile)
'If sExist = "Try I .txt"
    bCloseFile = False
'End If

If bCloseFileThen
    ///, "not found. Update process not proceeding."
    gsErrMsg = "Result not found. Process stops."
    MsgBox (gsErrMsg)
    'FindNoSeries = RC_ERROR
    Exit Function
End If

///, Open file for writing result
iFileNum = FreeFile
putFile = App.Path & "\" & "Result & \" & txtFileName.Text & ".txt"
Open putFile For Append as #iFileNum

///, Set initial value
iCountFound = 0
clMagicOne = Vai(txtDiff1.Text)
clMagicTwo = Vai(txtDiff2.Text)
clTolOne = Vai(txtTol1.Text)
clTolTwo = Vai(txtTol2.Text)
bFound = False
bNotFound = False
iCountOutput = 0
iMagicNo = clMagicOne
iTotalNo = iLnNum
For iOuterLoop = 0 To (iTotalNo - 1)
    iPrimaryNo = asNumberFound(iOuterLoop)
    ///, Set all captions
    lblFirstValue.Caption = iPrimaryNo
    lblFirstRow.Caption = iOuterLoop = 1
```



FIG.7I

```
IblSecondValue.Caption = " "  
IblSecondRow.Caption = " "  
IblThirdValue.Caption = " "  
IblThirdRow.Caption = " "  
////, Reset variable in interloop  
    bFound = False  
    bNotFound = False  
    iMagicNo = clMagicOne  
    iTolNo = ILnNum  
////, set interloop begin value  
ilnnerloop = iOuterLoop = 1  
////, do until end of list or pattern found or not found  
Do until BFound Or bNotFound Or (ilnnerloop > ITotal - 1)  
    ISecondaryNo = asNumbersFound(ilnnerloop)  
    If (Val(PrimaryNo) - Val(SecondaryNo)) = (Val(MagicNo) - Val(ItolNo)) And_  
    (Val(PrimaryNo) - Val(SecondaryNo)) = (Val(MagicNo) - Val(ItolNo)) And_  
        If IMagicNo = clMagicTwo Then  
            IblThirdValue.Caption = ISecondaryNo  
            IblThirdRow.Caption = ilnnerloop + 1  
            bFound = True  
            'FindNoSeries = RC_SUCCESS  
            Write #iFileNum, IPrimaryNo & "&" & ISecond & _  
                "&" & ISecondaryNo  
  
            Write #iFileNum, IPrimaryNo & "&" & ISecond & "&" & ISecondaryNo  
                '((IPrimaryNo - 18 + ISecond + ISecondaryNo +28) / 3  
            iCountFound = iCountFound +1  
        Else  
            IblSecondValue.Coupon = ISecondaryNo  
            IblSecondRow.Coupon = ilnnerloop + 1  
            ISecond = ISecondaryNo  
            IMagicNo = clMagicTwo  
        End If  
    Elseif (Val(SecondaryNo) - Val(PrimaryNo)) > Val(MagicNo) Then
```





FIG.7J

```
BNotFound = True
End If
ilInnerLoop = ilInnerLoop + 1
Next
///, Close file
Close #iFileNum

If bFound = False Then
'FindNoSeries = RC_NOT_FOUND
End If

If iCountFound <> 0 Then
    lblTrueFalse.Caption = "True"
    MsgBox (iCountFound & "specific series number are found and save in
    "& txtFileName.Text & ".txt)
Else
    lblTrueFalse.Caption = "False"
    MsgBox ("The specific series number is not found!!!")
End If
End Function
```